2WD/4WD SELECTING SYSTEM

CIRCUIT DIAGRAM

- Main switch
- Battery
- Main fuse
- CDI unit
- Four-wheel drive fuse
- Four-wheel drive relay 1
- Four-wheel drive relay 2
- Four-wheel drive relay 3
- On-command four-wheel drive switch and differential gear lock switch
- Gear motor
TROUBLESHOOTING

IF THE FOUR-WHEEL DRIVE INDICATOR FAILS TO COME ON:

Procedure

Check:
1. Fuse (main, four-wheel drive)
2. Battery
3. Main switch
4. Four-wheel drive relay 1
5. Four-wheel drive relay 2
6. Four-wheel drive relay 3
7. On-command four-wheel drive switch and differential gear lock switch
8. Gear motor
9. Wiring connections (the entire 2WD/4WD selecting system)

NOTE:
- Remove the following part(s) before troubleshooting:
  1) Seat
  2) Front carrier
  3) Front fender
- Use the following special tool(s) for troubleshooting.

Pocket tester:
P/N. YU-03112, 90890-03112

**EB802011**

<table>
<thead>
<tr>
<th>1. Fuse (main, four-wheel drive)</th>
<th>NO CONTINUITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to “CHECKING THE SWITCH”.</td>
<td>Replace the fuse.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>2. Battery</th>
<th>INCORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check the battery condition.</td>
<td>Clean the battery terminals.</td>
</tr>
<tr>
<td>Refer to “CHECKING THE BATTERY”</td>
<td>Recharge or replace the battery.</td>
</tr>
<tr>
<td>in CHAPTER 3.</td>
<td></td>
</tr>
<tr>
<td>Open-circuit voltage:</td>
<td>INCORRECT</td>
</tr>
<tr>
<td>12.8 V or more at 20 °C (68 °F)</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>3. Main switch</th>
<th>CORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to “CHECKING THE SWITCH”.</td>
<td>Replace the main switch.</td>
</tr>
</tbody>
</table>
4. Four-wheel drive relay 1

- Remove the four-wheel drive relay 1 from the wire harness.
- Connect the pocket tester (Ω x 1) and the battery (12 V) to the four-wheel drive relay 1 terminals.

<table>
<thead>
<tr>
<th>Tester (+) lead</th>
<th>Brown/Black terminal</th>
<th>Tester (–) lead</th>
<th>Black terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery (+) terminal</td>
<td>Brown/Red terminal</td>
<td>Battery (–) terminal</td>
<td>Blue/Green terminal</td>
</tr>
</tbody>
</table>

- Check the four-wheel drive relay 1 for continuity.

5. Four-wheel drive relay 2

- Remove the four-wheel drive relay 2 from the wire harness.
- Connect the pocket tester (Ω x 1) and the battery (12 V) to the four-wheel drive relay 2 terminals.

<table>
<thead>
<tr>
<th>Tester (+) lead</th>
<th>Black/Yellow terminal</th>
<th>Tester (–) lead</th>
<th>Black terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery (+) terminal</td>
<td>Brown/Red terminal</td>
<td>Battery (–) terminal</td>
<td>Blue/Red terminal</td>
</tr>
</tbody>
</table>

- Check the four-wheel drive relay 2 for continuity.
6. Four-wheel drive relay 3

- Remove the four-wheel drive relay 3 from the wire harness.
- Connect the pocket tester (Ω × 1) and the battery (12 V) to the four-wheel drive relay 3 terminals.

<table>
<thead>
<tr>
<th>Tester (+) lead →</th>
<th>Brown/Red terminal 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tester (−) lead →</td>
<td>Yellow/Black terminal 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Battery (+) terminal →</th>
<th>Brown/Red terminal 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery (−) terminal →</td>
<td>Yellow/Black terminal 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tester (+) lead →</th>
<th>Blue/Red terminal 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tester (−) lead →</td>
<td>Gray terminal 4</td>
</tr>
</tbody>
</table>

- Check the four-wheel drive relay 3 for continuity.

7. On-command four-wheel drive switch and differential gear lock switch

Refer to “CHECKING THE SWITCH”.

* NO CONTINUITY

Replace the four-wheel drive relay 3.

* CONTINUITY

INCORRECT

Replace the on-command four-wheel drive switch and differential gear lock switch.

* CORRECT
8. Gear motor

- Disconnect the gear motor coupler.
- Remove the gear motor from the differential gear case.
  
Refer to “FRONT CONSTANT VELOCITY JOINTS AND DIFFERENTIAL GEAR” in CHAPTER 7.
- Connect two C size batteries to the gear motor terminals (as shown illustrations).

A) Check that the pinion gear turns counterclockwise.
B) Check that the pinion gear turns clockwise.

- Make sure that the drive gear (shift fork sliding gear) operates correctly.

**NOTE:**

When installing the differential gear case in the gear motor, refer to “FRONT CONSTANT VELOCITY JOINTS AND DIFFERENTIAL GEAR” in CHAPTER 7.

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9. Wiring connection

- Check the connections of the entire 2WD/4WD selecting system.
  
Refer to “CIRCUIT DIAGRAM”.

**INCORRECT**

Replace the gear motor.

**POOR CONNECTION**

Properly connect the 2WD/4WD selecting system.

**CORRECT**

Replace the meter assembly.